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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/614,469	07/07/2003	Bruce C. Monk	AT-4	7622

7590 11/30/2004
Joseph E. Funk Jr.
26 Wildwood Street
Manchester, NH 03104

EXAMINER

LEE, CHEUKFAN

ART UNIT	PAPER NUMBER
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2622

DATE MAILED: 11/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/614,469

Applicant(s)

MONK ET AL.

Examiner

Mark Tsidulko

Art Unit

2875



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☒ Claim(s) 14-16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “*first angle*”, the “*second angle*” (claims 1, 3, 4, 6, 7, 9-12, 15) and the “*effective angle*” (claims 1, 3, 6) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled “Replacement Sheet” in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

Claims 1, 2, 3, 5, 6, 8, 16 are objected to because of the following informalities:

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Referring to Claims 1, 3, 6 the phrase “...lit at different levels of intensity the effective angle of the illumination may be varied...” should be changed to -...lit at different levels of intensity **and** the effective angle of the illumination may be varied...-

Referring to Claim 2 it is unclear what Applicant intends by “...the intensity of the **first** plurality of lights is increased as the intensity of the **first** plurality of lights is decreased and visa versa”. Also, “visa versa” should be changed to -vice versa-.

Referring to Claims 5 and 8 it is unclear what Applicant intends by “...**ones** of these light emitting diodes are energized by the illumination means to illuminate the document...” Light-emitting diode is an illuminating means and can be energized by power source only. Also, if a plurality of lights comprise LEDs that emit white light and near infrared light, it is understood that some of LEDs generate white light and other LEDs generate near infrared light, therefor the second part of claim started after coma, repeats the first part of the claim.

Referring to Claims 10 and 16 a phrase “visa versa” should be changed to -vice versa-.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 6, 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoneda (US 2002/0136009) in view of Ono (US 6,724,490).

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Referring to Claim 1, as best understood, Yoneda, discloses (Figs.2, 3) an apparatus for illuminating documents having first and second pluralities of lights positioned with respect to a document to illuminate it at the angle and controller [90] for illuminating the light at different intensity (col.11, lines 6-12).

Since the device may have minimal angle (first angle) of illumination and maximal angle (second angle) of illumination of the subject (angle between plane of the subject and axis of illumination) and any angle less than minimal and more than maximal are not acceptable, then the effective angle of the illumination must be only between the first and second angles.

Yoneda discloses the instant claimed invention except for that the first and second pluralities of lights have different intensity.

Ono discloses that the first and second light sources have different intensity (Abstract) in order to determine a dept-direction distance to the subject.

Referring to Claim 2, as best understood, Yoneda discloses the instant claimed invention except for that the intensity of the first plurality of lights is increased as the intensity of second plurality of light is decreased and vice versa.

Ono discloses disclose this limitation (col.3, lines 8-17).

Ono discloses that the first and second light sources have different intensity (Abstract) in order to determine a dept-direction distance to the subject.

It would have been obvious to one having ordinary skill in the art, at the time the invention was made, to provide the first and second pluralities of lights having different intensity, as taught by Ono, for the purpose of determination the distance to the subject of illumination.

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Referring to Claims 3 and 6, as best understood, Yoneda discloses (Fig.6) an apparatus for illuminating documents having third and forth pluralities of lights positioned with respect to a document to illuminate it at the angle, and controller [90] for illuminating the light at different intensity (col.11, lines 6-12).

Since the device may have a minimal angle (first angle) of illumination and a maximal angle (second angle) of illumination of the subject (angle between plane of the subject and axis of illumination) and any angle less than minimal and more than maximal are not acceptable, then the effective angle of the illumination must be only between the first and second angles.

Yoneda discloses the instant claimed invention except for that the first and second pluralities of lights have different intensity.

Referring to Claims 4, 7 since Yoneda discloses (Fig.2) that each illuminator [3] has individual power supplier [CA], it is understood that each illuminator can be selectively operated.

It would have been obvious to one having ordinary skill in the art, at the time the invention was made, to provide the pluralities of lights of Yoneda having different intensity, as taught by Ono, for the purpose of determination the distance to the subject of illumination.

Claims 5 and 8, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoneda and Ono as applied to claim 4 above, and further in view of Tuttle et al. (US 6,785,405).

Yoneda et al. discloses the instant claimed invention except for the LEDs that emit white and near infrared light.

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Tuttle et al. disclose an apparatus for document reading and authentication used white and near infrared lights for the purpose of emulating a point source of light and illuminate the laminated page of the document (col.13, lines 57-67; col.14, lines 1-5 and 30-33).

It would have been obvious to one having ordinary skill in the art, at the time the invention was made, to provide the white and near infrared LEDs, as taught by Tuttle et al., for the device of Yoneda et al. in order to emulate a point source of light and illuminate the laminated page of the document.

Claims 9-13, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoneda, Ono and Tuttle et al.. These references in a combination disclose structure of the device but do not disclose a method for illuminating document. It would have been obvious to one having ordinary skill in the art, at the time the invention was made to take the steps of apparatus above and provide a method for illuminating document since a prior art of record teaches or suggests a means for illuminating document:

Referring to Claim 9:

- illuminating the document with a first light source;
- illuminating the document with a second light source;
- varying the intensity of illumination from a first and a second light sources.

Referring to Claim 10 Ono discloses that the first and second light sources have different intensity (Abstract) in order to determine a dept-direction distance to the subject.

Referring to Claim 11:

- illuminating the document with a third light source;
- illuminating the document with a forth light source;

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- varying the intensity of illumination from a third and a forth light sources.

Referring to Claim 12, since Yoneda discloses (Fig.2) that each illuminator [3] has individual power supplier [CA], it is understood that each illuminator can be selectively operated.

Referring to Claim 13 Yoneda disclose (Figs. 3, 4, 8) a plurality of sets (rows) of LEDs located at a different positions and illuminate the document from different directions.

Allowable Subject Matter

Claim 14-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for allowance:

Referring to Claim 14 the prior art of record fails to show a method wherein after a set of light sources are selected to pick the direction from which a document will be illuminated, the intensity of the illumination of each of selected set of lights will be varied to effectively vary the angle of the light on the document.

Referring to Claim 15 the prior art of record fails to show a method having step of illuminating the document with a selected one of groups of lights.

Claim 16 is objected as claim depended on claim 15.

Conclusion

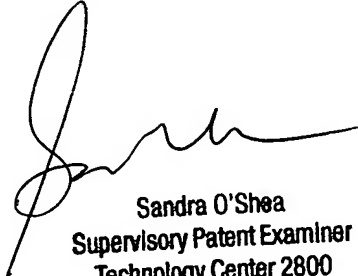
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Tsidulko whose telephone number is (571)272-2384. The examiner can normally be reached on 8 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306 for all communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

M.T.
November 9, 2004



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